

Claims

1. A method for dewatering suspensions comprising adding to the suspension a high IV, water soluble, cationic polymer flocculant and a coagulant, the coagulant being encapsulated or otherwise entrapped whereby release of the coagulant into the suspension is delayed.
2. A method as claimed in claim 1, wherein the coagulant is selected from low IV, water soluble, cationic polymers and inorganic coagulants preferably polyaluminium chloride.
3. A method as claimed in claim 2, wherein the water soluble, cationic polymer coagulant has an IV below 1.5 dl/g
4. A method as claimed in any preceding claim, wherein the flocculant has an IV above 2.0 dl/g.
5. A method as claimed in any preceding claim, wherein the flocculant and encapsulated or otherwise entrapped coagulant are added to the suspension together or separately
6. A method as claimed in claim 5, wherein the flocculant and encapsulated or otherwise entrapped coagulant are added to the suspension together in the form of an homogeneous blend.
7. A method as claimed in claim 6, wherein the blend includes a wetting agent.
8. A method as claimed in any preceding claim, wherein an acid is present when the coagulant is released into the suspension.
9. A method as claimed in any preceding claim wherein the suspension containing the flocculant and encapsulated or otherwise entrapped coagulant is subjected to drainage and the coagulant is released from encapsulation or other entrapment after the drainage of the suspension.
10. A method as claimed in claim 9, wherein the thickened suspension obtained from free drainage is subjected to filtration under pressure and the coagulant

is released from encapsulation or other entrapment during the filtration under pressure.

11. A composition for use in the method as claimed in any preceding claim comprising a high IV, water soluble, cationic polymer flocculant and a coagulant, the coagulant being encapsulated or otherwise entrapped.
12. A composition as claimed in claim 11, wherein the coagulant is selected from low IV, water soluble, cationic polymers and inorganic coagulants preferably polyaluminium chloride.
13. A composition as claimed in claim 12, wherein the water soluble, cationic polymer coagulant has an IV below 1.5 dl/g.
14. A composition as claimed in any of claims 11 to 13, wherein the flocculant has an IV above 2.0 dl/g.
15. A composition as claimed in any of claims 11 to 14, wherein the flocculant and coagulant are combined together as an homogeneous blend.
16. A composition as claimed in claim 15, wherein the blend includes a wetting agent.
17. A composition as claimed in any of claims 11 to 16, and including an acid.
18. A composition as claimed in claim 17, wherein the acid is encapsulated.
19. A composition as claimed in any of claims 11 to 18, wherein the ratio of coagulant to flocculant is in the range of from 0.2:1.0 to 2.0: 1.0 by weight.